

## Implementation of Microsoft Access-Based Accounting Software In Catholic Church In Yogyakarta

Bonifasius Aprilianto Simatupang<sup>1</sup>, Gabriella Felistyani Gunarso, Antonius Diksa Kuntara

**Abstract.** This study aims to determine the application of Microsoft Access-based accounting software on six Catholic Church's Parishes in Yogyakarta. The study is qualitative and the data were collected using interview and documentation method. The analysis used in this research covers the data reduction, data display, data verification, and conclusion. Based on the analysis, the study found three findings in three different contexts. In the environmental context, the implementation of the software is not uniform. This is caused by the Archdiocese of Semarang as the head principle of the Catholic Church's Parishes being studied, has not required all parishes to implement the software. In the organizational context, the six parishes were encouraged by head priest to implement the software. By using the software, the priest as the head of the parish can easily check the activity of each work team. Lastly, based on technological context, the user can get two benefits of using the software: first, the head of the parish can control and measure the performance of each work team in the organization and second, the user can get a detailed, cleared, and communicative financial report. The study then proposes three recommendations related to implementation of the system. Firstly, Archdiocese of Semarang has to make a stronger encouragement related to the use of the software, especially to parishes in the highlands and coastal area. Secondly, archdiocese should provide further training fully and is conducted slowly. The training mentioned is best carried out routinely during a certain time period. Thirdly, the head priest of the parish has to choose a competent church treasurer. This should be done to minimize obstacles in the preparation of church's financial reports. These recommendations can positively give impact to the use of Microsoft Access-based accounting software to enhance the accountability of the Catholic Church's parishes.

**Keywords:** 1 Microsoft Access · 2 Accounting Software · 3 Catholic Church · 4 Yogyakarta Indonesia.

### 1. INTRODUCTION

Technological developments in the period of globalization were increasingly advanced and rapidly developing. This is indicated by the increasing number of people, companies, government institutions, and organizations that take advantage of technological advances as a means of facilitating their tasks and responsibilities. For example, government institutions use social media applications as a means of accommodating the aspirations of the entire community. In addition, the company also applies technology as a means of making an Accounting Information System (AIS), to facilitate the financial management process.

The Indonesian state has a variety of organizations consisting of various sectors, especially sectors that are related to society, where one of them is a non-profit organization. In PSAK No. 45, a non-profit organization is defined as an institution that is not profit-oriented but has an obligation to

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<sup>1</sup> Corresponding Author, E-mail: [bonifasius94@gmail.com](mailto:bonifasius94@gmail.com), Tel: +62 813-1528-7400

account for the use of management of the resources that have been obtained, for funders and society without expecting any compensation. In this regard, there is one form of the non-profit organization in the religious field, namely the church. The church is defined as a means of worshipping God in a solemn way, so that vertical communication between the people and God can take place solemnly and horizontal communication, that is the relationship between fellow human beings can be well established.

Financial statements are reports that provide information about the financial position, performance, and cash flow of an entity that is useful for a variety of users of financial statements in making economic decisions. The financial statements are expected to be able to provide financial information that is relevant, has clarity, and can be accounted for. The church in carrying out the preparation of financial statements uses the reporting standard PSAK No. 45, which contains financial reporting of non-profit entities. Financial statements in non-profit entities include financial position reports in the final reporting period, activity reports and cash flow statements for a current period, as well as notes to financial statements.

The system is something that has parts that interact with each other to achieve certain goals through the stages of input, process, and output. The Accounting Information System (AIS) is an arrangement of various documents, communication tools, executives, and various implementers and various reports designed to transform financial data into financial information. Accounting Information Systems (AIS) include a variety of activities related to the company's transaction processing cycles, which include the income cycle, expenditure cycle, production cycle, and financial cycle.

In developing and creating an Accounting Information System (AIS), it is necessary to pay attention to several important aspects such as the response of the community who act as users of Accounting Information Systems (AIS). Community response is important because it can provide an overview of community satisfaction with the benefits obtained through the application of the Accounting Information System (AIS). The response of the community itself is seen through two sides, namely acceptance and rejection of the application of the system that has been developed and created. The public response will be more deeply understood about the acceptance of the community towards the system, which is based on three contexts, namely environmental, organizational, and technological. The first is environmental context, in which the context describes how an organization maintains its competitive advantage in increasingly high competition, by adopting an Accounting Information System (AIS), namely Extensible Business Reporting Language (XBRL), explaining regarding parties who put pressure on the adoption of XBRL, where the parties include customers, suppliers, partners, and software vendors, discussing how the support or influence provided by the government on the adoption of the system and seeing how information support is available - information that is adequately presented. The second is the organizational context, where this context explains the active role of top management in determining the adoption of XBRL which will be applied to an organization, parties that can be trusted to provide considerations in adopting XBRL, and see how the size of the organization in adopting new system by looking at whether the adoption of new system will provide convenience or cause difficulties for users who run it. The latter is technological context, which explains the benefits obtained by adopting XBRL, consistency in the new system that will be adopted, user comfort and understanding in implementing it, and the ability of system testing to see whether the information system is new it is good or not for organizations that will implement it.

At present, the Archdiocese of Semarang is directing churches in Yogyakarta to implement Microsoft Access in its financial management process. But based on the training that has been carried out, it is found that there are positive responses and negative responses given by users towards the implementation of Microsoft Access. Positive responses can be seen in churches that

have the desire to change the format of financial statements in the form of Microsoft Access and/or use both formats simultaneously in financial management. Whereas the negative response is seen in the church which thinks that the user is not very familiar with the format in it, and has difficulty understanding it.

## **2. LITERATURE REVIEW**

### **Parish Organization Financial Report**

#### **1. Definition of Parish Financial Statements**

The Parish Financial Report is a set of financial information that can be used as a basis for making decisions on various parish pastoral policies. In preparing the financial statements, an understanding of the basic framework of financial statements and accounting processes is needed. While the use of financial statements for decision making must be aware of the limitations of financial statements.

#### **2. Objectives of the Parish Financial Report**

The purpose of the Parish Financial Report is to provide information about the financial position, activity, cash flow, and financial performance. The various uses of these financial statements, which include the following:

- a. As a material for reviewing and evaluating the performance of the Parish Council.
- b. As a material consideration for making decisions.
- c. As a material for consideration to formulate a new policy.
- d. As a sign of the credibility of a parish.

#### **3. Component of Parish Financial Report**

Parish financial statements are financial statements that refer to PSAK 45 which consists of:

- a. Financial Position Report or commonly called a balance sheet; is a report that shows the financial position on a certain date, which includes assets, liabilities or liabilities, and net assets.
- b. An Activity Report is a report that provides information about parish receipts and expenses for a certain period, resulting in a surplus or deficit.
- c. Cash Flow Report is a report that provides information about cash receipts and expenses for a certain period of time.
- d. Budget Realization Report Revenue and expense is a report that provides information about the realization of revenues, expenses, transfers, surplus/deficit, and the remaining more/less for the use of the budget which is compared to the budget in one period.
- e. Realization of the Fixed Asset Procurement Budget is a report that presents information on the realization of procurement of fixed assets compared to its budget in one period.

- f. The notes to the Financial Report are notes that are attached to the financial statements that contain a summary of the main accounting policies and other explanations.

### **Extensible Business Reporting Language (XBRL)**

#### **1. Definition of Extensible Business Reporting Language (XBRL)**

According to a journal entitled "A Solution Looking for A Problem: Factors associated with non-adoption of XBRL", it was explained that there was an adoption of a new information system called Extensible Business Reporting Language (XBRL), where the system is output from XML. This system itself provides facilities in the form of automatic data products that provide convenience in managing financial data. At present, XBRL is being promoted as a reliable and timely language of business and financial reporting in providing financial and non-financial information to internal and external stakeholders (Debreceeny and Gray, 2001). With the adoption of XBRL by the organization, it is expected to reduce compliance costs and provide competitive benefits with potential investors.

#### **2. Adoption factors of Extensible Business Reporting Language (XBRL)**

There are factors that influence an organization to adopt XBRL, which include the following:

##### **a. Environmental Context**

Environmental context is a factor that is generated through the external business environment and industry characteristics, as well as government support and infrastructure. The following are factors that originate from the environmental context, which can affect the adoption of XBRL:

##### **1) Market Competition**

In a competitive market, discussing how an organization will maintain a competitive advantage by adopting technology (Doolin and Troshani, 2007). With increasing competition, an organization needs to pay attention to competitive markets in implementing new information systems.

##### **2) Trading Partner**

In adopting a new system, an organization is also influenced by the pressures given by the trading partners who also work with the organization. These parties include customers, suppliers, partners, and software vendors. Trading partners in this case also need to provide facilities to the organization in supporting the implementation of new information systems.

##### **3) Regulators and/or Government Influence**

Regulators and governments also have a large influence on organizations, especially in adopting and implementing new information systems. This is because regulators and government institutions encourage organizations to use XBRL to increase the cost of compliance with the organization.

##### **4) Availability of Information and Support**

Regarding the adoption of the new information system, an organization must also pay attention to whether the information that has been presented is sufficient for organizations and external parties to provide support for adopting XBRL. Sufficient and adequate information will make it easier for the organization to account for it from outside parties.

b. Organizational Context

Organizational context is a factor originating from the internal organization, where these factors influence the organization in implementing a new information system. The following are factors that originate from the organizational context, which can affect the adoption of XBRL:

1) Top Management Support

Top management is a very influential party in implementing a new information system. This is because top management has the authority to supervise organizational resources. Therefore, when an organization makes a decision in adopting XBRL, the top management of an organization will have a major influence on its decision making.

2) Organization Champion

Neufeld et al. (2007) found the existence of trusted people in business can influence technology adoption decisions. Top management will appoint someone who is trustworthy, where someone has competencies that are in accordance with their fields so that the decision can be taken appropriately and correctly.

3) Organization Size and Resources

Organizational size is also a problem that can affect the adoption of XBRL. Large-scale organizations have more resources than small organizations. In contrasting differences, small-scale organizations have innovative and less open and conservative ideas.

c. Technological Context

Technological factors are influencing factors in implementing the information system that has just been seen from the technology sector offered and applied. The following are factors that originate from the technological context, which can affect the adoption of XBRL:

1) Relative Advantage

Potential adopters usually evaluate the relative advantages and benefits of new technology to perceived costs (Doolin and Troshani, 2007; Oliver and Whymark, 2005; Premkumar et al., 1994). From the side of the organization itself, the organization must consider the costs and benefits of implementing a new information system, where the costs incurred must be proportional to the benefits provided.

2) Compatibility

To implement a new information system, the organization must be consistent in its application. In this case, the organization will evaluate new technologies such as XBRL, to see the compatibility of the system with existing systems and processes currently underway.

3) Complexity

Rogers (2003) states that although complexity may not be as important as relative superiority and compatibility factors, complexity has the potential as a barrier to adopting the technology. A compiler of new information systems must pay attention to the complexity of the new information system, and make users feel comfortable and practical in using the new information system.

#### 4) Trialability

Before implementing a new information system in the long run, an organization needs to test the new information systems that will be used. That is because an organization has the opportunity to reduce the uncertainty associated with adopting and implementing the technology. If the results of the trial are declared good, then a new information system can be applied to the organization.

### 3. METHODOLOGY

Research method is qualitative research method. Qualitative research is the research that include a arrangement of interpretive techniques which is try to describe, give code, translate so it can related with definition, not the frequency of the phenomenon which is often or rarely happen naturally in social realm

#### Data Analysis Technique

According to Miles and Heberman (1992), data analysis could be used with a three techniques following:

- Data Reduction

Data Reduction is used by researchers to do election process, simplification, focusing, abstraction and transformation raw data from field data. This research focuses to impelementation of Accounting Information System and user response in six catholic churches in Yogyakarta Region

- Presentation data

Researchers do the presentation data which is started for interview in six catholic churches, transcript the result, then present data. Researchers present data in the form of narrative text.

- Conclusion

Researchers conclude the research for knowing the final result in the research. Researchers conclude the research with narrative text.

### 4. RESULT AND DISCUSSION

#### Enviromental Context

- a. It is important to impelement the Microsoft Access in the Parish.

Based on interview result to six parishes, it is important to impelement the Microsoft. With using the Microsoft Access, every parish will get a financial information clearly and detailly. Beside that, Microsoft Access can give financial report detailly. In this globalization era, religious organization like church have to implement Accounting Information System like Microsoft Access.

- b. Archiodese of Semarang has to give encouragement stronger.

The Archdiocese of Semarang has to make encouragement stronger. The Archdiocese of Semarang can give encouragement with giving a several facilities like accounting software (Microsoft Access and Microsoft Excel), guideline for doing the parish accounting (PPAP KAS), training and consultation. Based on Kumetiran Parish Priest, The Archdiocese of Semarang has to make a stronger encouragement to the churches which are located in highland and coastal area. A stronger encouragement propose to minimize obstacle of Human Resources. A stronger encouragement can be given with a slowly accompaniment.

c. Microsoft Access gives a clearly and obey information

With implementing the Microsoft Access, user can get the clearly and obey information. Beside that, user can get the detail financial statement from using the Microsoft Access. User can get cash flow statement, financial position statement, and the other statement from the Archdiocese of Semarang.

#### Organizational Context

a. Priest of the six parishes give the encouragement for using the Microsoft Access.

Priest of the six parishes give the encouragement for using the Microsoft Access. With using the Microsoft Access priest of the parish can know the performance of the workteam in each area to parish council. Beside that, with using the Microsoft Access, priest of the parish can measure a parish autonomy. Religious organization has to follow the globalization era. Accounting Information System has to give a clear financial statement and can be accounted to The Archdiocese of Semarang.

b. The Consideration of implement the Microsoft Access is responsibility to the people.

The consideration of the parish is convenience in financial management. Related to people, the consideration to implement the Microsoft Access is transparency and accountability

c. Six of parishes use same guideline for using the Microsoft Access.

Six of the Parishes uses a same guideline, it is called PPAP KAS. But, there are the several differences for implementing the guidelines. In Banteng Parish, offering money is used for education, and giving to Archdiocese of Semarang. In Kumetiran Parish, they don't use standard that used for Dana Papa Miskin and Dana Solidaritas Paroki.

#### Technological Context

a. Advantage from using the Microsoft Access

Seven advantages from using Microsoft Access which include:

- 1) Parish priest can control easily to church financial
- 2) Help parish treasury for doing estimation of preparation of Expenditure of Budget Plan
- 3) Help to check the amount of the parish fund
- 4) Can show datas in faster time.

- 5) Preparation of financial statement can be faster, measurable, and documented
  - 6) User can get a more accurate, clearly, detail financial statement
- b. Consistency of using Microsoft Access

Based on interview result, six parishes implement Microsoft Access consistently. They follow the guidelines from The Archdiocese of Semarang. They still have hope to upgrade all of information. It is caused by more needs from the parish.

- c. Readiness to implement of Microsoft Access.

Based on interview result, three parishes are ready to implement the Microsoft Access and three parishes are not ready to implement the Microsoft Access. Three parishes are ready to implement Microsoft Access because it can help the financial management. Three parishes are not ready to implement Microsoft Access because of Human Resources.

#### Problems Finding from Implementing the Microsoft Access

Based on interview result to six parishes, The researchers found following obstacles of implementation of Microsoft Access:

Tabel 1. Result and Recommendation Table

Kriteria yang Diharapkan	Fakta	Penyebab	Risiko	Rekomendasi
Implementation of Microsoft Access in Yogyakarta Episcopal Vicariate	There was several parishes which didn't implement the Microsoft Excel for financial management.	Human Resources	Financial report will not uniform and neat	Archdiocese of Semarang gives socialization and training related to Microsoft Access
Strong Encouragement from Archdiocese of Semarang to Church in Yogyakarta Episcopal Vicariate related to Microsoft Access	There are several Churches which is located in highland and coastal area still not get a encouragement related to implementation of Microsoft Access	Because of far location from big city.	User will feel difficulties to implement Microsoft Access	The Archdiocese of Semarang gives stronger encouragement with accompaniment slowly
Archdiocese of Semarang gives training fully	Archdiocese of Semarang didn't give fully training in Yogyakarta	Archdiocese of Semarang has time limit.	User doesn't know Microsoft	Fully training from Archdiocese of Semarang to



related Microsoft Access.	Episcopal Vicariate		Access detailly	Microsoft Access's user
The Archdiocese of Semarang doesn't require to parishes in Yogyakarta Episcopal Vicariate for using the Microsoft Access.	Churches in Yogyakarta Episcopal Vicariate are given freedom for using Microsoft Access or Microsoft Excel	Implementation of Microsoft Access in all of Churches in Yogyakarta Episcopal Vicariate is only a recommendation	Financial report is not uniform and neat	Directing all of Churches in Yogyakarta Episcopal Vicariate for using Microsoft Access simultaneously.
Churches recruit competence treasurer	Church could not find a competencies treasurer	Church only asking for availability from parish people for being a treasurer .	Treasurer or user will feel difficulties for using Microsoft Access	Churches recruit a competence treasurer.

Based on interview result, researchers found the following obstacles of implement Microsoft Access:

1. There were a several Churches in Yogyakarta Episcopal Vicariate which didn't implement Microsoft Access. This is caused by Human Resources which didn't has a competence for using the Microsoft Access. For example in Klodran Parish which has a new treasurer, so he didn't know using of Microsoft Access detailly. If this situation is still continue, so the financial report will not uniform. Based on this situation, researchers recommend The Archdiocese of Semarang has to give a socialization and training related to implementation of Microsoft Access for two days. First day is how important to implement Microsoft Access in globalization era. Second day is how to use Microsoft Access, how to make and print a financial statement, and how to fill all of account. With all of those recommendation, researchers hope all of parish in Yogyakarta Episcopal Vicariate will implement Microsoft Access.
2. The second obstacle is from Priest Santo's opinion from Kumetiran Parish. There were churches which is located in highland and coastal area didn't implement Microsoft Access, this is caused by far location from big city. Because of that reason, so the user could not go to the big city for joining the socialization and training. If this situation still continue, so the user from that churches will feel difficulties for using the Microsoft Access. Researcher recommend to make encouragement stronger with giving accompaniment slowly. With this recommendation, researchers hope all of that church feel encouragement for using Microsoft Access.
3. The third obstacle is from Mr. Firman's opinion. The archdiocese only gave socialization, so they gave the training fully. If this situation is still continue, the user will get difficulties for using the Microsoft Access. Researchers recommend to give training fully for all of the

parish in Yogyakarta Episcopal Vicariate. With this Recommendation, researchers hope with that recommendation, all of the user will feel happy to use Microsoft Access.

4. The fourth obstacle, The Archdiocese of Semarang didn't require all of the parish to use Microsoft Access. This is caused by from The Archdiocese of Semarang which gave freedom to all of the Parish for choosing either Microsoft Access or Microsoft Excel. If this situation is still continue, so the financial statement will not uniform and neat. Researchers recommend to direct to all of the parish di Yogyakarta Episcopal Vicariate for using the Microsoft Access. This is propose for making financial report uniform.
5. The fifth obstacle, there was several Parish in Yogyakarta Episcopal Vicariate didn't has a competence treasurer. This is caused that church only asking for availability from the parish people. If this situation still continue, the user will feel difficulties for using Microsoft Access, so the financial reporting will not uniform and compatible each other. Reserachers recommend to Parish recruit a competence treasurer. With this recommendation, researchers hope parish will has a competence treasurer, so the financial reporting will uniform and neat.

## 5. CONCLUSION

The conclusion of this paper will be divided into two parts, namely:

Conclusions based on the Three Contexts of Implementation of Microsoft Access

Based on the results of the study, the researchers obtained conclusions divided into three contexts, namely:

### 1. Environmental Context

Based on the environmental context, the implementation of Microsoft Access is not uniform. This was caused by Archdiocese of Semarang , which did not require all Catholic Churches to implement Microsoft Access. This condition has an impact, namely the preparation and reporting of finance to be not uniform and not neatly arranged.

### 2. Organizational Context

Based on the organizational context, the six Catholic Churches were encouraged by Father Parish regarding the implementation of Microsoft Access. By using Microsoft Access, the parish priest can easily check the performance of each work team per field. The most important thing that related to the system can provide clarity on the results of financial reports so that the financial report can be accounted by the people and Archdiocese of Semarang.

### 3. Technological Context

Based on the technology context, Microsoft Access users can feel two benefits. The first benefit is the parish priest can supervise and measure the performance of the work team between fields in the parish. The second benefit is users can get detailed, clear and communicative financial reports.

Conclusions related to Steps That Need To Be Taken Regarding the Implementation of Microsoft Access

Researchers have recommendations for minimizing existing constraints. These recommendations include:

1. The researcher gave recommendations to provide socialization and training regarding Microsoft Access. The socialization and training were conducted for 2 days, the first day was held on the importance of using Microsoft Access in the era of globalization while the second day was held training on ways or steps to use Microsoft Access, how to enter accounts into Microsoft Access, how to create and print financial reports. With recommendations such as the one above, it is expected that more and more all the churches in Yogyakarta will use Microsoft Access. By using Microsoft Access, financial reports between churches can be compatible, uniform and neatly organized.
2. The researcher has a recommendation that Archdiocese of Semarang needs to strengthen the urge to use Microsoft Access. Strengthen encouragement by providing gentle assistance to the church. With recommendations as above, the church will feel the urge and will use Microsoft Access.
3. The researcher recommends Archdiocese of Semarang to hold full training for users of Microsoft Access. With the Archdiocese of Semarang holding full training, there will be more users will be happy to use Microsoft Access, and will be more Parishes are using Microsoft Access in managing church finance.
4. The researcher has a recommendation to immediately obligate implementation of Microsoft Access. Although it seems a little pushy, the parish will immediately use Microsoft Access. By requiring all parishes to use Microsoft Access and from Archdiocese of Semarang also provide socialization and training, it is expected that more Catholic Church will use Microsoft Access.
5. The researcher has a recommendation that the church must be more selective in choosing operators and treasurers so that in the future the church will not experience obstacles in the process of preparing financial accountability reports to the diocese. That is, the parish party needs to choose a treasurer who is competent in the field of accounting and competent in using Microsoft Access. Parish administrators need to be a little firm and selective in managing finances.

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